Fujitsu's Direction Towards Smart City

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1990 Ecological footprint 1.2
1990 CO₂ emissions 200 billion tons
1987 Population 5.0 billion

2007 Ecological footprint 1.5
2010 CO₂ emissions 300 billion tons
2011 Population 7.0 billion

2020 Ecological footprint 1.8
2020 CO₂ emissions 380 billion tons
2020 Population 7.7 billion

2050 Ecological footprint 2.8
2050 CO₂ emissions 57 billion tons
2050 Population 9.3 billion

1972 The Club of Rome “The Limits to Growth”
1992 Earth Summit
2012 Rio+20
2012
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10 and 50 years into the Future

Famine and poverty in developing nations

Aging population in developed nations

Need to rebuild efficient and sustainable social infrastructure

1990
Ecological footprint
1.2

1990
CO₂ emissions
200 billion tons

1987
Population
5.0 billion

2007
Ecological footprint
1.5

2007
CO₂ emissions
300 billion tons

2010
Population
7.0 billion

2011
Population
7.0 billion

2020
Number of Planet Earths
1.8

2020
CO₂ emissions
380 billion tons

2020
Population
7.7 billion

2050
Number of Planet Earths
2.8

2050
CO₂ emissions
57 billion tons

2050
Population
9.3 billion

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Challenges Facing Japan

Dwindling birthrate and aging population

Weakening local economy due to prolonged recession

The Great East Japan Earthquake on March 11, 2011
- Restoration and reconstruction of disaster areas
- Stabilization of energy and other social infrastructure

1972 The Club of Rome “The Limits to Growth”

1992 Earth Summit

1990 Ecological footprint

2010 Ecological footprint

2020 Ecological footprint

2050 Ecological footprint

1990 CO₂ emissions

2010 CO₂ emissions

2020 CO₂ emissions

2050 CO₂ emissions

1990 Population

2010 Population

2020 Population

2050 Population

Number of Planet Earths

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Fujitsu's Smart City Vision

Smart City objectives

- Resolving social issues, including environment, economy, and energy
- Improving residents' quality of life

To be achieved by optimized social infrastructure
Fujitsu's Smart City Vision

- **Smart City definition**
  - Delivering smart social infrastructure by ICT
  - Thinking about and resolving with the residents issues related to the region and its revitalization

Fujitsu's ICT solutions

- Energy
- Environment
- Transportation
- Government services
- Media
- Industry
- Medical and health care
- Household
Regional Medicine Initiatives

Supporting the establishment of a society which looks after residents' health

Examples of introduction of HumanBridge
Fujinokuni Net (Shizuoka), Ajisai Net (Nagasaki), Shinshu Medical Net (Nagano), Hyakumangoku Medical Net (Ishikawa), etc.
Agricultural Initiatives

Supporting prosperous agriculture and abundant food supplies into the future

Farming corporation Fukuhara Farm

- Since Apr. 2009
- Hikone City, Shiga Prefecture
- Production and sale of rice, wheat, soybeans, vegetables, and fruits. Undertaking farm work
- Acreage: 150 ha (330 farm fields)

Farming corporation Shinpuku Seika

- Since Oct. 2008
- Miyakonojo City, Miyazaki Prefecture
- Production, processing, and sale of outdoor-grown vegetables (Taro, burdock root, sweet potato, carrot, Japanese radish, cabbage, shallot, etc.)
- Acreage: 100 ha (273 farm fields)

Aon Agri Create Co., Ltd.

- Visualization of management, production, and quality
- Since Dec. 2011
- Chiba City, Chiba Prefecture (head office)
- Production and sales of outdoor- and greenhouse-grown vegetables
- Company-owned farms: 8 (Chiba and other locations)

Farming corporation Sowakajuen Co., Ltd.

- High quality
- Since Mar. 2011
- Arida City, Wakayama Prefecture
- Production, processing, shipping, and sale of mandarin oranges and undertaking farm work
- Acreage: 6 ha (30 locations)

Human resource development
Consistent harvest

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With the on-site utilization of ICT as a starting point, connecting distributors, regions, and consumers through value chains.
Transportation Initiatives

Provision of intelligent transport systems

- Traffic information systems which provide information on traffic congestion, etc.
- ETC system
- Supporting driving through car navigation and digital tachograph

Initiatives with regional transportation as a starting point

- Rejuvenation of regional transportation and regional vitalization
- Reduction of environmental impact

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Fujitsu's Smart City Vision

- Combining various solutions and initiatives in diverse fields
- Resolving community issues and creating value in a variety of ways
Community-Based Project—Domestic

Aizu region, Fukushima Prefecture

Participation in the project to implement the "smart community" concept
Urban development leveraging electricity and heat supply,
the coordination of renewable energy promotion and regional disaster planning,
establishment of an energy control center, etc.

Urayasu City, Chiba Prefecture

Participation in the industry-university-government joint consortium
for the implementation of Urayasu's initiative
for an Environmentally Harmonious City

Toyota City, Aichi Prefecture

Participation in the area of energy data management
systems for a next-generation energy
and social infrastructure

Satsuma Sendai City, Kagoshima Prefecture

Participated in the Satsuma Sendai
next-generation energy vision committee
Aizu Area Smart Community Promotion Project

Providing services for the visualization of the percentage of renewable energy usage and of power usage

- Services for heat supply management
- Services for power generation status management
- Services for management of disaster prevention center facilities

Hydroelectric power generation

Large-scale PV panel plant

Power generation by biomass

PV panel

Shelter

Collecting data on electricity generated

Collecting data on electricity demand

Energy Control Center

School and public facilities

Factory

Office building

Collector services

Resident's services Monitoring

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Community-Based Project: International

**Saudi Arabia**

Launch of a smart community project that gives consideration to both environmental and energy issues.

**Thailand**

Provided support in the form of a NEDO research partnership project to resolve environmental issues in Thailand.
Fujitsu's Smart City Vision

- Combining various solutions and initiatives in diverse fields
- Resolving community issues and creating value in a variety of ways

- Environmentally-friendly city
- Safe and secure disaster-resistant city
- Sustainable city
- High Quality and Convenient city

Combining various solutions and initiatives in diverse fields

- Energy
- Environment
- Transportation
- Government services
- Media
- Industry
- Medical and health care
- Household

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Fujitsu's Vision

Human Centric Intelligent Society

Creating an affluent society in which people can live with peace of mind
shaping tomorrow with you